

## **SECTION B-2 - TRAFFIC PATTERNS**

### **B-2.1 TRAFFIC PATTERNS**

The Niagara Plant of Occidental Chemical Corporation is located in the southern part of the City of Niagara Falls, bordering the Niagara River. The plant is divided by Buffalo Avenue (New York Route 384) which travels east and west. According to the City of Niagara Falls Traffic Department, the average twenty-four (24) hour traffic volume on Buffalo Avenue between Hyde Park Boulevard and 56th Street is nine thousand six hundred forty-five (9645) vehicles.

#### **B-2.1.1 Roadways**

The main in-plant two-way roadways are 47th Street, Energy Boulevard, 53rd Street, Adams Avenue and Iroquois Street. Vehicles use paved areas surrounding process buildings and other paved plant roads to reach the main in-plant roadways.

All employee's cars are limited to parking lots outside the plant except EFW employees. Within the plant, traffic vehicles consist mostly of tractor trailers, front-end loaders, forklift trucks, pickup trucks and small specialty vehicles.

#### **B-2.1.2 Construction**

All roads are constructed of a minimum four (4) inch bituminous concrete (blacktop) which overlays approximately twelve (12) inches of compacted aggregate base.

#### **B-2.1.3 Load Bearing Capacity**

All roads are capable of bearing loads up to twenty thousand (20,000) pounds per axle. The tank trailers used to make deliveries to the facility have an average tare weight of twenty-seven thousand (27,000) pounds, and an average gross weight of fifty-one thousand (51,000) pounds. Maximum weights would be thirty-four thousand (34,000) pounds tare and seventy-nine thousand (79,000) pounds gross. Tank trailers have a 4-axle configuration; therefore the load bearing capacity of the road is not exceeded.

Tractor trailers have a 4-axle configuration and have a typical tare weight (tractor and trailer) of

twenty-eight thousand (28,000) pounds. There will be a maximum number of seven (7) bags (6000-pounds maximum each) per forty-foot (40 ft) trailer; thus, the maximum gross weight will be seventy thousand (70,000) pounds (twenty-eight thousand (28,000) pounds tare plus forty two thousand (42,000) pounds load). Even if the bags were filled to capacity, the loaded tractor trailer weight would be below the twenty thousand (20,000) pound per axle road limitation.

Up to eighty (80) drums per load will be hauled by tractor trailer. The maximum load will be forty thousand (40,000) pounds at five hundred (500) pounds per drum for a maximum gross weight of sixty-eight thousand (68,000) pounds, which is below the axle weight road limitation.

Up to forty thousand (40,000) pounds will be transported in large containers (i.e., rollofs or lugger boxes). The total weight including the transport vehicle will be a maximum of fifty-five thousand (55,000) pounds. The transport vehicles have a 3-axle configuration and, therefore, would not exceed the twenty thousand (20,000) pound per axle road limitation.

A railroad spur also exists in the T/V area for transportation of bagged remedial waste.

#### **B-2.1.4 In-plant Traffic Volume**

Movements to the liquid waste incinerator facility average one (1) to two (2) trailers per day, seven (7) days per week. In addition to the truck traffic to the liquid waste incinerator, there is normal plant vehicle (i.e., pick-up or van) traffic and from three (3) to fifteen (15) trailers of waste water for our carbon treatment units moving through the area. In addition to this volume, approximately sixty (60) customer tractor trailers enter the 53rd Street entrance each day to pick up finished product or deliver raw materials. Finally, approximately ninety-five (95) tractor trailers and municipal garbage trucks enter the Energy Boulevard gate from 56th Street each day making deliveries to American Ref Fuels's Energy From Waste Facility. For bag-related and drum-related shipments from remote sites to the T-Area and U-Area North Storage Units, a maximum of twenty (20) trailers per day will be required. A maximum of five (5) rolloff deliveries per day will be made to the T-Area Rolloff Storage Pad.

#### **B-2.1.5 Traffic Control**

Traffic is controlled by stop signs at key in-plant intersections and by traffic signals on Buffalo Avenue (see attached Figure B-1). The plant speed limit is ten (10) miles per hour.

### **B-2.1.6 Truck Movements to Liquid Waste Incineration Facility**

Tractor trailer movements use the following routes traveling from a plant area to the facility (Figure B-1). All trailers first go to the scale in the northeast corner of the plant for weighing, then travel west to M-Area, then south crossing perpendicular to Buffalo Avenue, through V-area to Adams Avenue then west to the facility. The following are routes taken from an area to the scale:

C-Area Southwest by plant roadways to 47th Street, north to Energy Boulevard and east to scale.

M-Area (Three loading areas) East to 53rd Street, then north to scale.

N-Area (Two loading areas) North to Adams Avenue, then east to V-Area. North through V-Area, crossing Buffalo Avenue into M-Area. East to 53rd Street then north to scale.

### **B-2.1.7 Trailer Unloading Areas**

The Liquid Waste Incinerator trailer unloading areas consist of coated concrete pads. A containment wall surrounds each pad, excluding the trailer entrance way at the east end. Each pad is provided with a sump to contain rainwater and spills. Trailers are backed onto the pad and spotted from an adjacent roadway located directly east.

#### **Bags**

The bags will be unloaded within the Container Buildings (T-28 ) by forklift or crane equipped with adapters for handling the bags. The forklift and the crane will be equipped with pneumatic tires to minimize the damage to the surface of the asphalt. As a matter of routine, load bearing plates will be used by the crane to enhance its stability while handling the bags. All OCC operators of forklifts, trucks, cranes, and other such equipment will have been properly trained.

It is expected that six (6) to seven (7) bags will be transferred from a remediation site on each trip. Normally, a trailer with removable sidewalls and a tarpaulin covering will be used to carry the bags. However, stake trucks, flat bed trailers, rollofs, or dump trucks may also be used. The operations for any of these is essentially identical. The trailer will be driven into the storage building, parked, and properly chocked. The tarpaulin and at least one sidewall will be removed to allow access to the bags when the forklift is used. The crane could be used to unload trucks from the top without having to remove a sidewall.

# TRAFFIC FLOW MAP

B-28

DWG. D-60339

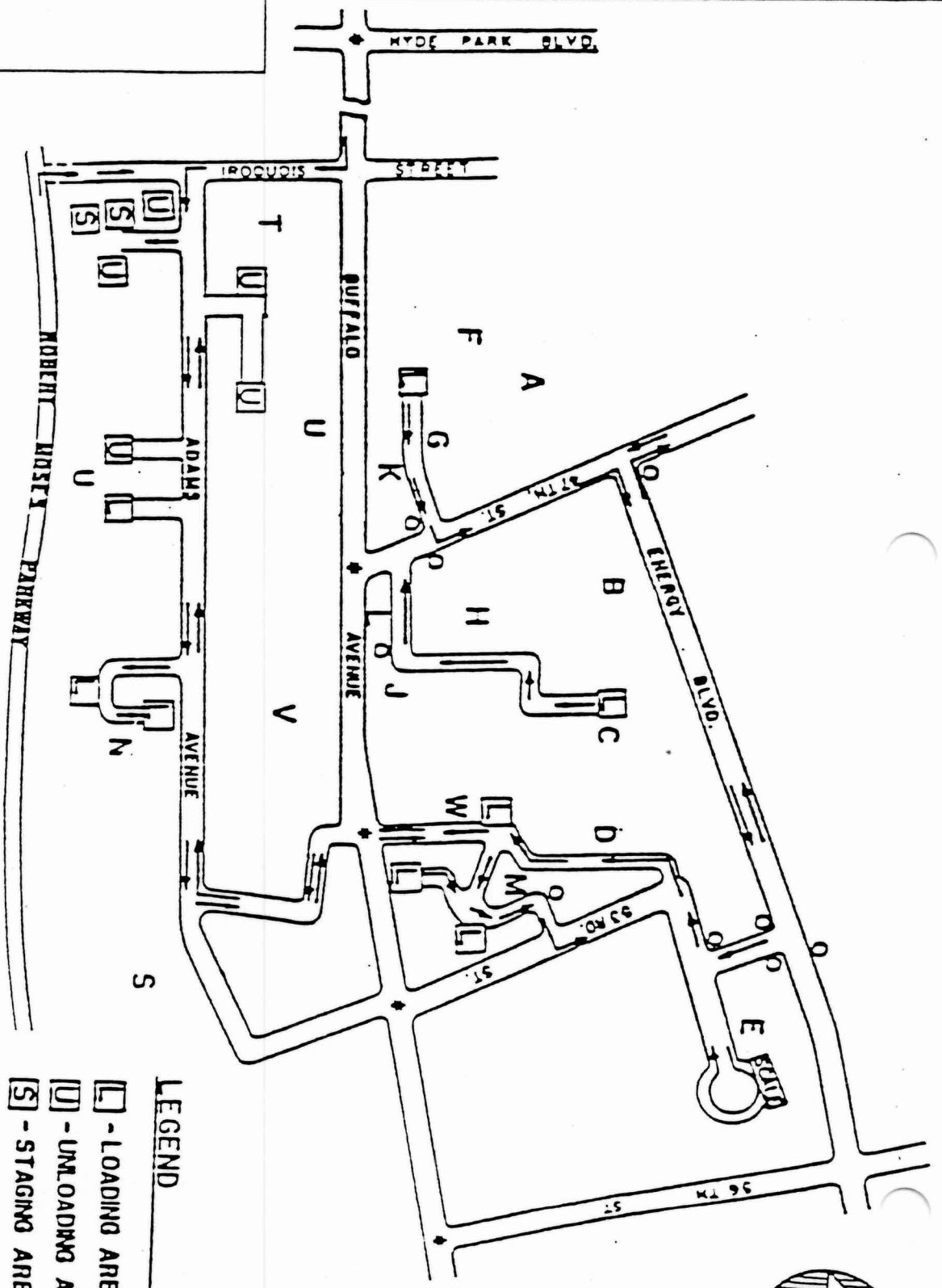
Occidental Chemical Corporation



NO.	REVISIONS	Drawn By	Date
		R	6-92
Drawn By: _____ Date: _____ Check By: _____ Date: _____ App: _____ Date: _____ SCALE: NOTED BLDG NO: PLANT			

TRAFFIC FLOW

MAADANA RIVER



## LEGEND

- [L] - LOADING AREA
- [U] - UNLOADING AREA
- [S] - STAGING AREA
- ♦ - TRAFFIC SIGNAL
- O - STOP SIGN





Bags placed on the lower courses of the storage area will normally be handled by a forklift but may also be handled by a crane. Normally, those bags going on the upper courses will be handled by a crane.

When unloading is done by forklift, it will approach the trailer from the side. The bag's lifting straps will be placed over the forks, and the bag will be hoisted from the trailer. If going onto one (1) of the lower two (2) courses, the forklift will directly place them there. Otherwise, the bags may be temporarily placed to the side within the storage boundary, and the crane will move the bags to the upper courses.

When handling the bags by crane, a special lifting adapter will be used to handle the bags. As with the forklifts, the bag's lifting straps will be placed on the adapter. The bags will then be hoisted either directly from the trailer or from the pad and placed in the storage area. If needed, the bags may be temporarily placed within the building and later relocated to the storage area.

Shipments of bags/drums from T-28, U90, and the T-Area pad may be by rail or truck using major interstate highways to the designated site.

### Drums

The drums will be unloaded at the Drum Storage Building U-90 by forklifts. The drums will be brought to the Drum Storage Building by a trailer or flatbed.

Only trained personnel will operate forklifts, unload trucks and handle drums. A forklift will be used to move nonpalletized drums onto pallets. The drums will be placed four to a pallet, and the pallets will be placed in rows at a maximum stacking of three (3) tiers high.

### **B-2.1.8 Truck/Trailer Fleet**

The fleet used to transport material to the site consists of about seven (7) tractors and about ten (10) tank trailers. Truck trailer capacity ranges from three thousand and fifty (3050), to five thousand one hundred (5100) gallons; average is four thousand (4000) gallons. Tractors with flatbed trailers have a 4-axle configuration with a maximum load bearing capacity of eighty thousand (80,000) pounds gross. The average weights should be fifty-two thousand (52,000)

pounds gross.

#### **B-2.1.9 Transportation of Liquid Remedial Wastes**

Liquid remedial waste will be transported to the liquid waste incinerator facility in tank trailers. All shipments will be transported and manifested pursuant to 6NYCRR, Part 364 and 372. The following describes the transportation of each remedial waste:

a. Hyde Park NAPL

NAPL from the Hyde Park Landfill will be transported to the liquid waste incinerator facility in tank trailers, under escort by an emergency response van. Approximately three (3) shipments per month will be made in tank trailers having a maximum capacity of four thousand (4000) gallons. The following route will be used between Hyde Park and the Niagara Plant:

East on New Road to Witmer Road (NY 31)

East on Witmer Road to I190

South on I-190 to Buffalo Avenue (NY 384)

West on Buffalo Avenue to 53rd Street

North on 53rd Street to the plant entrance and truck scale incinerator

South on 53rd Street to Buffalo Avenue

West on Buffalo Avenue to Iroquois Street

South on Iroquois Street to Adams Avenue plant entrance,

**or alternately**, South on Hype Park Blvd to Buffalo Avenue, then East on Buffalo Avenue to 53<sup>rd</sup> Street and to the scale.

b. Taft NAPL

Taft NAPL will be shipped by tank trailer. Tank trailer shipments will follow the Interstate highway System to I-190 (North) and exit onto Buffalo Ave (NY384). The truck will go west on Buffalo Ave. and follow the same route to the liquid waste incinerator as described above in Section B-2.9a.

c. S-Area NAPL, Niagara Plant NAPL

Remedial waste from the S-Area or other areas of the plant will be transported by tank trailer. All shipments first go to the scale in the northeast corner of the plant for weighing, then travel west to the M-Area, then south crossing perpendicular to Buffalo Avenue, through the V-Area to Adams Avenue then west to the liquid waste incinerator facility.

The following routes are routes taken from general areas to the scale:

Areas West of 47th Street and North of Buffalo Ave. -East to 47th Street, north to Energy Blvd then east to scale.

Areas East of 47th Street, West of Conrail line and North of Buffalo Ave. -- Southwest by plant roadways to 47th Street, north to Energy Blvd and east to scale.

Areas East of Conrail line, North of Buffalo Ave. - To 53rd Street, then north to scale.

Areas South of Buffalo Ave. -- To Adams Ave., then east to V-Area; north through V-Area, crossing Buffalo Avenue to M-Area; east to 53rd Street then north to scale.

d. 102nd Street NAPL

Remedial liquid waste from 102nd Street will be transported by tank trailer. Shipments will travel along River Road and west on Buffalo Avenue following the same route to the scale and liquid waste incinerator as detailed in Section B-2.1.9a above.

e. Durez Plant NAPL

Remedial liquid waste from the Durez facility will also be transported by tank trailer. Shipments will travel east on Walck Road to Erie Avenue, North on Erie Avenue, and West on Niagara Falls Boulevard (Route 62) to 56th Street. South on 56th Street to Buffalo Avenue and then West on Buffalo Avenue following the same route to the scale and liquid waste incinerator as detailed in Section B-2.1.9a above.

f. Durez Niagara Plant NAPL

Remedial liquid waste from the Durez Niagara Plant will be transported by tank trailer. Shipments will travel west on Packard Road to Hyde Park Blvd, south on Hyde Park Blvd to Buffalo Ave, east on Buffalo Avenue to 53rd Street, and to the scale and incinerator.

g. Love Canal NAPL

Remedial liquid waste from the Love Canal will be transported by tank trailer. Shipments will travel South on 95th Street to Frontier Ave., East on Frontier Ave. to 102nd St., and South on 102nd St. to Buffalo Ave./River Road. Travel will continue West on Buffalo Ave. following the same route to the scale and liquid waste incinerator as detailed in Section B-2.1.9a above.

**B-2.1.10 Transportation of Remediation Waste to T-Area and U-Area North Storage Facilities**

Materials from remedial activities at the four "remote" (non-Niagara Plant) locations (Love Canal, North Tonawanda, Hyde Park, and the 102nd Street Landfill) will be either bagged, drummed, or containerized for shipment to the T-Area and U-Area North Storage Units at the Niagara Plant.

Bags

Bagged wastes are primarily from remediation activities and are generated on a non-routine basis. Each bag will contain between four thousand (4000) and six thousand (6000) pounds of material.

Drums

The average drum is anticipated to contain five hundred (500) pounds of material. Each truck will carry twenty (20) tons or eighty (80) drums of material. On an annual basis, ongoing remedial activities from Love Canal will generate approximately two (2) shipments of drummed waste per year. Similarly, approximately one (1) and forty-one (41) truck trips will be generated annually from North Tonawanda and the Hyde Park Landfill respectively.

Rolloffs

Each rolloff is anticipated to contain a maximum of 40,000 pounds of debris such as cement chunks, tires, etc. encountered during the remediation activities. Although the expected quantity is much less, provisions have been made for a total from all sites of 100 containers. Less than one (1) per day on average will be delivered to the T-Area.

**SECTION B-3**

**PREVENTIVE PROCEDURES/STRUCTURES AND EQUIPMENT**

## **SECTION B-3 -PREVENTIVE PROCEDURES/STRUCTURES AND EQUIPMENT**

### **B-3.1 PREVENTION OF HAZARDS IN UNLOADING OPERATIONS**

Concrete curbing is provided to prevent residue trailers from backing into the unloading pumps.

Bumper posts are provided to prevent physical damage to the trailer unloading platform.

All unloading operations are done in accord with OCC SR 4 which is located in the Appendix B-II. The purpose of this is to prevent accidental movement of trucks, trailers and tankers during loading and unloading operations.

### **B-3.2 SPILL CONTAINMENT (RUNOFF PREVENTION)**

Runoff from the hazardous waste processing areas will be prevented through the use of containment dikes, curbs, and sloped concreted pads. Spills or leaks in the container storage areas, the tanks storage areas, trailer unloading pads, and the liquid waste incinerator area will be contained by the dikes or sloped concreted sections and collected in sumps and basins located in each area.

### **B-3.3 PREVENTION OF CONTAMINATION OF WATER SYSTEM**

The City water supply ties into the process equipment at the liquid waste incinerator quench tower, and at the control building HVAC unit.

The City of Niagara Falls requires the installation of backflow prevention devices on all industrial water distribution lines connected to the City's water mains to protect public health. Occidental has installed approximately twenty-six (26) backflow preventors at the plant.

The devices installed will prevent the reversal of flow in a water line caused by a reduction in the supply pressure. The backflow preventors are reduced pressure principle units, consisting of two (2) independent check valves with an intermediate relief valve that automatically opens to the



atmosphere to discharge any backflow or back siphonage if either check valve should leak. Similar devices have also been installed in chemical processes within the plant.

#### **B-3.4 MITIGATION OF EFFECTS OF EQUIPMENT FAILURE AND POWER OUTAGES**

The following describes plans to mitigate effects of equipment failure and power outages. This issue is primarily addressed to the Liquid Waste Incinerator Operation since impact is minimal for other areas.

##### Liquid Waste Incinerator

The effects of equipment failure and power outages associated with the liquid waste incinerator are minimized by the safety systems built into the process. In the event of a power outage or equipment failure, all instrumentation would go into a fail-safe mode and this process would be shut down according to the program built into the Programmable Logic Controller. The is equipped with an emergency battery supply which would be operable during a loss of power situations. The also does a check once per hour to indicate loss of battery power. Section 1.6 of Attachment F-1 details the automatic shutdown features designed into the incinerator control system.

The quench chamber is equipped with an emergency water supply which is piped, with appropriate controls, to the upper spray distributors to provide an alternate water supply should the normal water makeup be interrupted in the event of equipment malfunction.

##### Bag and Container Storage Areas

There are no significant effects due to the loss of power in the bag and container storage areas. If a sump pump fails, it is replaced by our Maintenance Department. Vent fans in the bag storage buildings are run on an as needed basis. A power failure of the fans has no environmental consequences.

##### Tanks

In the event of a power failure, any batch transfers would be stopped. The transfer would be resumed once the power is back on. No significant effects will result due to loss of power.

Transfer pumps and other tank device failures would be remedied through repair by our Maintenance Department. No significant effects will result from temporary equipment failure.

### **B-3.5 PREVENTION OF UNDUE EXPOSURE OF PERSONNEL TO HAZARDOUS WASTE**

Operating personnel have at their disposal appropriate protective equipment such as a full acid suit, a full face mask, boots, gloves, and a face shield. Safety glasses, a hard hat, safety shoes, and a escape respirator are worn at all times in the operating area. Furthermore, they are trained (see Attachment C - Personnel Training) to use the proper equipment depending upon the circumstances. Appropriate Personal Protective Equipment (PPE) is required when disposing of waste laboratory samples. Each operator also participates in a plant-wide clothing and laundry program.

Wash-down stations are provided for the tank farm dike area and trailer unloading pad to flush chemical contaminants into the collection sumps.

### **B-3.6 PREVENTION OF REACTION OF IGNITABLE, REACTIVE AND INCOMPATIBLE WASTE**

The Liquid Waste Incineration Facility and its personnel are protected from complications in handling ignitable, reactive and incompatible wastes through a complex system of controls and practices which include training, dissemination of information, engineering safeguards and specific work practices and procedures.

#### **B-3.6.1 Precautions to Prevent Ignition or Reaction**

- a. Ignitability - The following specific preventative measures are taken to prevent ignition:
  - (1). The residue handling area is an enforced "No Smoking" area and "No Smoking" signs are displayed prominently.
  - (2). Storage tanks are padded with an inert (N<sub>2</sub>) gas, in a pressure controlled system.
  - (3). Storage tanks and trailer unloading areas are equipped with an electrical grounding system.

- (4). Niagara Plant SR14 "Hot Work Permit" (Flame or Spark) is applicable to this operation as it is throughout the plant. It requires precautions to be taken (prior to using flame or spark in the area) including explosimeter testing, cleaning and disconnecting equipment, removal of combustibles and establishing "Fire Watchers".
- (5). Ignitable drums are stored in separate areas of the drum warehouse (U-90). See Section D2-2 of the Permit.
- (6). All pyrophoric waste (i.e. phosphorous containing), if generated, is stored on the U-Area outdoor pad away from all other wastes.
- b. Reactivity - The residues handled are reactive primarily because of incompatibility with acids and water. This is, therefore, addressed in Section B-3.6.4., Management of Incompatible Wastes.

#### **B-3.6.2 General Precautions**

- a. Tanks are designed with vents through "Ventsorb" activated carbon scrubbing units. A separate rupture disc to relieve overpressurization is also provided. In addition, a portable caustic scrubber is available in the U-Area to neutralize acid gases as needed in conjunction with activated carbon.
- b. Waste characteristics are determined per the Waste Analysis Plan.
- c. A Work Order Permit System is in force to insure that safe working conditions exist prior to and during the work activities of repairmen, maintenance men, yard men, and contractors.
- d. Chemical waste guidelines are in place for proper management of waste.
- e. Niagara Plant SR's 1 and 17 cover the personnel protection standards adhered to in this facility including head, eye respiratory, face, and clothing requirements.
- f. Niagara Plant SR 11 "Loading and Unloading of Trailers, Tankers and Trucks" details procedural requirements.

- g. Operator training is provided per the Training Manual (see Attachment C) and in the Spill Control Contingency Response Plan (see Attachment G).
- h. Department Emergency Response Plans are implemented.

A complete set of the SR's are attached in Appendix B-II. These SR's are subject to revision on an ongoing basis.

#### **B-3.6.3 Management of Wastes in Tanks**

- a. Residues are stored as noted above with an inert gas pad. Vents are controlled through activated carbon beds to prevent fugitive emissions. Rupture discs prevent overpressurizing storage tanks.
- b. NFPA (1981) Fire Code Buffer Zone Requirements are met by the storage vessels (Table E-2 in Attachment E).
- c. Spill control for the storage tanks is designed to handle greater than one hundred percent (100%) of the capacity of the largest tank plus the volume of rainfall from a 25 yr., 24 hour storm.
- d. No tank is allowed to store flammable mixtures. All stored mixtures have a flash point above 100 °F

#### **B-3.6.4 Management of Incompatible Wastes**

Incompatible wastes and materials are not stored in the same tank.

- a. Tankage is designated for specific (compatible) wastes and are clearly so identified.
- b. Tank trailers are designated for specific (compatible) wastes.
- c. An internal manifesting system identifies wastes from the source to the disposal unit.
- d. Unloading pumps, lines and tanks are clearly labeled as to waste service.

All Safety Regulations (SR's) are attached in Appendix B-II. These SR's are subject to revision on an ongoing basis.

### **B-3.7 MAINTENANCE PROCEDURE**

The key to early detection of equipment failure is inspection and preventative maintenance. Through daily and weekly walk-thru inspections, operators and supervisors are aware of the condition of all operating equipment. Work orders are written to repair or replace items showing signs of abnormal operation.

Maintenance is performed by qualified craftsman that are trained to diagnose and repair operating equipment.

Calibration is performed on instrumentation and equipment in accordance with the QA Program for the Liquid Waste Incinerator Permit Parameter Monitoring Instrumentation attached in Appendix B-X. Continuous emission monitors are checked and calibrated daily according to manufacturer's specifications. Mass flow meters are rezeroed when the feed differentials do not agree with the flow meter reading or other feed rate problems are apparent.

Nozzles for liquid waste injection are checked for obvious signs of wear by visual inspection. If the nozzle is defective, it is replaced depending on the availability of nozzle.

In addition to the inspection and preventive maintenance programs, a process shutdown is normally taken twice per year. Details of that program can be found in Section B-1.2.3c.

### **B-3.8 PROCEDURE FOR CARBON CANISTER REPLACEMENT**

The following procedure will be followed to determine the replacement schedule for each of the carbon canisters on the vents of the storage tanks at the residue incinerator. The schedule will be established by measuring the vent from the carbon canister for total organics, and determining the point of breakthrough. Measurement of total organics will be done utilizing an HNU meter.

1. Each carbon canister will be checked once per month using the Hnu meter.
2. A reading will be taken for total organics. If the reading exceeds fifty (50) ppm uncorrected, the carbon canister will be replaced.

### **B-3.9 Prevention of upsets to the Incinerator during Start-up and Feed Switches**

In order to prevent upsets to the Incinerator during start-ups or during feed source switches, a very deliberate procedure has been developed from our numerous years of operating the unit. No matter what the waste characteristics this procedure has been found to eliminate upsets by eliminating sudden changes to the feed to the system. The procedure is as follows:

1. Once the Incinerator has been heated up using natural gas and fuel oil to its minimum exit temperature of 1102°C the system is allowed to stabilize for a minimum 2 minute (interlocked) stabilization period to allow the temperature to level off.
2. After this period the valves in the feed lines from the chosen feed source are verified to be set correctly and the chosen feed pump is placed into the run mode.
3. The speed control for the chosen feed pump is activated and adjusted until a flow is seen on the chosen feed system's flow indicator. This indicates that the feed system is not plugged and is ready to run.
4. At this time, the Operator monitors the Exit Temperature of the Incinerator and slowly increases the waste feed rate until he sees the exit temperature begin to increase indicating that the waste is burning.
5. At this point the operation becomes a juggling act where the operator slowly increases the waste feed rate while reducing the fuel oil feed rate to maintain the Exit Temperature of the incinerator within the 1102 to 1280°C permitted operating window. The Operator's experience tells him how fast these changes can be made.
6. The operation is completed (usually within 30 to 60 minutes) when the fuel oil rate reaches zero or the maximum allowable waste feed rate for the waste being fed is reached. If fuel oil is still required to maintain the temperature, a second waste may be burned co-currently through a separate feed nozzle using the same slow deliberate start-up procedure.

Note: the procedure is the same for feed switches, except the fuel oil is replaced with the waste that was originally burning.

This procedure has been very effective in preventing process upsets during these periods of potential instability.

APPENDIX B-I

EXAMPLE INSPECTION FORMS



## APPENDIX B-1 - EXAMPLE INSPECTION FORMS

### Weekly Inspection Report Forms for Container and Tank Storage

- 1) Results of Weekly RCRA Waste Storage Area Inspection (Cover Letter)
- 2) Residue Drum Storage Area Weekly Inspection Report (N-Area)
- 3) N-Area Drum Storage Pad (Plan View)
- 4) Container Storage Area - Weekly Inspection Report (M-Area, N-Area, C-Area)
- 5) Residue Tank Weekly Inspection Report (MCT Residue Decant Tank, T-8 MCT Residue Tank, T-19 DECH+ Residue Tank M-22, T-9 Mixed Residue Tank - M-22)
- 6) U-Area North Drum Warehouse Weekly Inspection (Building U-90)
- 7) T -Area North Bag Storage Building Weekly Inspection ( Building T-28 )
- 8) T-Area Rolloff Storage Pad Weekly inspection Report
- 9) X-Area Fencing Inspection Report.

### Weekly Inspection Checklist for Liquid Waste Incinerator and Calgon Unit

- 1) Tanks
- 2) Trailers
- 3) Pumps
- 4) Containment Areas
- 5) Filter
- 6) Miscellaneous, Feed Piping and Scrubbing System
- 7) Instrumentation
- 8) Safety Equipment
- 9) NAPL Storage Area
- 10) Chemical Waste Storage Tank Emission Control System Inspection
- 11) Corrective Action.

### Daily Inspection Forms

- 1) RCRA Hazardous Waste Container Storage Daily Inspection Sheet (Any storage pad)
- 2) RCRA Hazardous Waste Storage Tank Daily Inspection Log Sheet (T-9 Mixed Residue Tank M-22, T-19 DECH - PLUS Residue Tank)
- 3) MCT Bottoms and MCT Decant Tank-U-Area.

### Non-routine Inspection Forms

- 1) Tank Inspection Sheet - Wall Thickness and Corrosion (3 pages)
- 2) Internal Hazardous Waste Manifest/Intrplant Trailer Transfer Ticket (Each loading/unloading)
- 3) Tanker Test and Inspection Report ( 1-year, 2-year, and 5-year)
- 4) RCRA Subpart CC Trailer Inspection Form

WEEKLY INSPECTION REPORT FORMS FOR  
CONTAINER AND TANK STORAGE

Niagara Plant – Environmental

Date : \_\_\_\_\_

To: Waste Coordinator: \_\_\_\_\_

Area Superintendent: \_\_\_\_\_

Subject: Results of the Weekly RCRA Waste Storage Area Inspection

Week of: \_\_\_\_\_

Attached are the results of the weekly RCRA Waste Storage Area Inspection covering the Drum Pads and Storage Tanks in your area. The Production Area is responsible for each tank or set of drums, and any problems associated with them has been listed in the first column of the Drum Pad Report. It is the responsibility of these areas to correct any problem noted IMMEDIATELY by law { 6NYCRR Part 373-2.2(g)(3)}.

A follow-up inspection will be conducted every Tuesday by the Environmental Control Department and the NYSDEC Onsite Monitor to be sure problem areas are corrected. Items that remain for TWO (2) successive inspections will be brought to the attention of the proper Plant Staff Manager.

Plant Area Inspected: \_\_\_\_\_

Specific Comments:

\_\_\_\_\_  
Joseph A Destino  
Staff Environmental Technician **B051**  
Niagara Plant – Waste Management

DATE OF INSPECTION:		TIME:		INSPECTOR'S NAME: J DESTINO	
LOCATION INSPECTED: <b><u>N-AREA</u></b>		TITLE: ENV. WASTE COORDINATOR			
MAXIMUM NUMBER OF DRUMS ALLOWED AT THIS LOCATION:		184	% FULL		
TOTAL NUMBER OF DRUMS PRESENTLY STORED AT THIS LOCATION:		0	0.0%		
INSPECT EACH DRUM FOR THE FOLLOWING:		1) CONTAINER CONDITION (ie.. LEAKS, FUMING, & EXCESSIVE CORROSION, BULGING.) 2) IS THE TOP SEALED? (ie... NO LID IN PLACE, BUNGS MISSING, THE LID IS NOT BOLTED TIGHT) 3) CONTAINER MARKINGS (ie...NO FILL DATE, NO WASTE CODE, HAZARDOUS WASTE NOT MARKED .) 4) IS THE MATERIAL STORED IN THE PROPER DOT - SPECIFIED CONTAINER FOR THIS MATERIAL?			
ALL DEFECTS OR PROBLEMS MUST BE CORRECTED IMMEDIATELY BY LAW!					
AREA OF RESPONSIBILITY	OCC WASTE CODE NUMBER	TOTAL DRUMS THIS CODE ON PAD	# DRUMS READY TO SHIP	NUMBER OF DRUMS      PROBLEM CONDITION FOUND	REMEDIAL ACTION REQUIRED
<b>TOTALS:</b>		0	0	0	

B  
0  
5  
2

**N AREA DRUM STORAGE PAD**

DATE:

TIME:

**COMMENTS:**

**TOTAL DRUMS ON THE PAD:**

0

1

2

3

4

5

6

7

○

## SUMP

0

0

0

0

0

0

0

**B**  
**053**

# CONTAINER STORAGE AREA - WEEKLY INSPECTION REPORT

M-AREA \_\_\_\_\_

N-AREA \_\_\_\_\_

C-AREA \_\_\_\_\_

	YES	NO	CORRECTIVE ACTION PLAN / COMMENTS
<b>1. CONTAINER PLACEMENT</b>			
NOT ON PALLETS			
NOT GROUPED TO PREVENT REACTION			
LIQUIDS NOT SINGLE STACKED			
aisle space not sufficient to inspect			
<b>2. PALLET CONDITION</b>			
DAMAGED			
CONTAMINATED			
<b>3. RAMP CONDITION</b>			
CRACKED			
UNEVEN SETTLEMENT			
DETERIORATION OF THE SURFACE			
SPILLED MATERIAL PRESENT			
<b>4. PAD AND DIKE WALL CONDITION</b>			
CRACKED			
DETERIORATION OF THE SURFACE			
SPILLED MATERIAL PRESENT			
<b>5. SUMP AND TRENCH CONDITION</b>			
WATER PRESENT			
CLOGGED WITH MUD OR DEBRIS			
CRACKED			
DETERIORATION OF THE SURFACE			
<b>6. SUMP PUMP CONDITION</b>			
NOT OPERABLE			
NO ELECTRIC POWER			
DISCHARGE HOSE DETERIORATION			
<b>7. SPILL WASH DOWN EQUIPMENT</b>			
WATER SUPPLY FROZEN OR OFF			
HOSE NOT STORED IN THE RACK			
HOSE DETERIORATION			
<b>8. SAFETY SHOWER AND EYEWASH</b>			
WATER SUPPLY FROZEN OR OFF			
SHOWER OR EYEWASH NOT OPERABLE			
<b>9. WARNING SIGN</b>			
NOT READABLE			
DAMAGED			

I certify that this report is correct at the time of this inspection

INSPECTOR'S SIGNATURE: \_\_\_\_\_

DATE:        /        /       

TIME: \_\_\_\_\_

B 054

**RESIDUE TANK - WEEKLY INSPECTION REPORT**

T-8 MCT RESIDUE TANK

☐☐

T-9 MIXED RESIDUE TANK M-22 TANK FARM

MCT RESIDUE DECANT TANK

☐☐

T-19 DECH - PLUS RESIDUE TANK M-22

	YES	NO	CORRECTIVE ACTION PLAN/COMMENTS
<b>1. TANK CONDITION</b>			
EXCESSIVE CORROSION TO TANK BODY			
EXCESSIVE CORROSION TO TANK SUPPORTS			
NOTICEABLE LEAKS FROM HOLES OR SEAMS			
<b>2. ASSOCIATED PIPING CONDITION</b>			
LEAKING CONNECTIONS			
DAMAGED PIPING			
PIPE TROUGH DRAIN VALVE INOPERABLE			
LIQUID FOUND IN PIPE TROUGH			
TANK VALVES INOPERABLE			
STEAM TRACER LEAKING			
<b>3. TRANSFER PUMP CONDITION</b>			
HOUSING CRACKED			
PACKING INOPERABLE			
PUMP INOPERABLE			
PUMP PAN FULL REQUIRING DRAINING			
<b>4. ASSOCIATED INSTRUMENTATION CONDITION</b>			
LEVEL GAUGE INOPERABLE			
TEMPERATURE GAUGE INOPERABLE			
PRESSURE GAUGE INOPERABLE			
<b>5. PAD AND DIKE WALL CONDITION</b>			
CRACKED			
DETERIORATION OF THE SURFACE			
SPILLED MATERIAL PRESENT			
<b>6. SUMP AND TRENCH CONDITION</b>			
WATER PRESENT			
CLOGGED WITH MUD OR DEBRIS			
CRACKED			
DETERIORATION OF THE SURFACE			
<b>7. SUMP PUMP CONDITION</b>			
NOT OPERABLE			
NO ELECTRIC POWER			
DISCHARGE HOSE DETERIORATION			
<b>8. WARNING SIGN</b>			
NOT READABLE			
DAMAGED			

I certify that this report is correct at the time of this inspection

INSPECTOR'S SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

TIME: \_\_\_\_\_



# U-AREA NORTH DRUM WAREHOUSE WEEKLY INSPECTION

DATE: \_\_\_\_\_

BLDG. NO. U-90 ☐

INSPECT EACH OF THE FOLLOWING ITEMS AT LEAST ONCE PER WEEK:

- \* DRUMS STACKED NO MORE THAN 3 PALLETS HIGH
- \* DRUMS NOT IN AISLE
- \* DRUMS "PROPERLY CLOSED" / LEAKING DRUMS / DRUMS NOT ON PALLET / BULDGING DRUMS
- \* DETERIORATION OF THE STRUCTURE, FLOOR, OR SUMP SURFACES
- \* WET AREAS OUTSIDE OF THE BUILDING, EROSION OR UNDERMINING OF THE BUILDING INDICATING LEAKAGE.

	FINDINGS	REMEDIAL ACTION PLAN & COMMENTS
STRUCTURE CONDITION		
FLOOR CONDITION		
CONTAINER CONDITION		
FLOOR SUMP LIQUID PRESENT		
PUMP OUT (YES/NO)		

TO PUMP THE SUMP OUT, THE FOLLOWING ANALYTICAL RESULTS MUST BE RECORDED HERE AND BE WITHIN THE SPECIFIED LIMITS.

A REPRESENTATIVE SAMPLE MUST BE TAKEN BY RECIRCULATING THE SUMP FOR 2 MINUTES BEFORE THE SAMPLE IS TAKEN.

IF NOT WITHIN THE SPECIFIED LIMITS, CONTACT ENVIRONMENTAL CONTROL FOR DISPOSAL GUIDANCE.

IS A SHEEN PRESENT ? (NO SHEEN IS ALLOWED)		
2ND PHASE ORGANIC PRESENT ? (NO 2ND PHASE ALLOWED)		
pH (5-10) (AS MEASURED ON pH PAPER)		
T O C (10 PPM OR LESS)		

CFS Continuous Monitoring		
Volatile Organic Compounds (HNU-PID)		
Particulates (PCD-1)		

NOTE: If the concentration of organic vapors exceeds 5 ppm or the concentration of particulates exceeds 150 ug/cu meter, the inspector will immediately upgrade to Level B protection to continue his inspection.

B 056

# U-AREA NORTH DRUM WAREHOUSE WEEKLY INSPECTION



BLDG. NO. U-90

NOTE ANY DEFECTIVE CONDITIONS (IE: FULL SUMP, FLOODED FLOOR, LEAKING DRUMS, OR ANY INOPERATIVE EYEWASH SYSTEM, WHERE PROVIDED) AND THE REQUIRED REMEDIAL ACTION TO CORRECT THE CONDITION.

	YES	NO	CORRECTIVE ACTION PLAN / COMMENTS
<b>1. DRUM PLACEMENT</b>  NOT ON PALLETS NOT GROUPED TO PREVENT REACTION AISLE SPACE INSUFFICIENT DRUMS STACKED OVER 3 PALLETS HIGH			
<b>2. DRUM CONDITION</b>  DRUMS "PROPERLY CLOSED" DAMAGED, BULGING LEAKING			
<b>3. PALLET CONDITION</b>  DAMAGED CONTAMINATED			
<b>4. STRUCTURE CONDITION</b>  LEAKING DETERIORATION OF STRUCTURE			
<b>5. RAMP CONDITION</b>  UNEVEN SETTLEMENT CRACKED/DETERIORATION OF SURFACE SPILLED MATERIAL PRESENT			
<b>6. FLOOR &amp; DIKE WALL CONDITION</b>  LIQUID PRESENT CRACKED/DETERIORATION OF SURFACE SPILLED MATERIAL PRESENT			
<b>7. SUMP CONDITION</b>  LIQUID PRESENT CLOGGED WITH MUD OR DEBRIS CRACKED/DETERIORATION OF SURFACE			
<b>8. SPILL EQUIPMENT</b>  SHOVELS, BROOMS, ABSORBANT SUPPLY			STORED IN U-42 & U-60
<b>9. WASH DOWN EQUIPMENT</b>  WATER SUPPLY FROZEN OR OFF HOSE NOT STORED IN RACK HOSE DETERIORATION		NA NA NA	
<b>10. SAFETY SHOWER / EYEWASH</b>  WATER SUPPLY FROZEN OR OFF SHOWER / EYEWASH NOT OPERABLE			
<b>11. WARNING SIGN</b>  NOT READABLE DAMAGED			

I CERTIFY THAT THIS REPORT IS CORRECT AT THE TIME OF THIS INSPECTION.

DATE:

TIME:

INSPECTOR'S SIGNATURE:

B057

## T—AREA ROLLOFF STORAGE PAD WEEKLY INSPECTION

PAD INSPECTOR: \_\_\_\_\_

DATE: \_\_\_\_\_

INSPECT EACH OF THE FOLLOWING ITEMS AT LEAST ONCE PER WEEK:

- \* VERIFICATION OF DESIGNATED ROLLOFF STORAGE ONLY (NO DRUMS)
- \* ROLLOFFS STACKED NO MORE THAN 1 HIGH
- \* ROLLOFFS ONLY IN DESIGNATED AREAS / ON WEIGHT DISTRIBUTION PADS
- \* SPILLED MATERIAL PRESENT / ROLLOFFS NOT CLOSED
- \* DETERIORATION OF THE PAD, DIKE WALL, OR SEDIMENT SUMPS
- \* EROSION OR UNDERMINING OF THE PAD INDICATING RAINWATER LEAKAGE

	FINDINGS	REMEDIAL ACTION PLAN & COMMENTS
DESIGNATED ROLLOFFS ONLY (NO DRUMS)		
PAD CONDITION		
ROLLOFF CONDITION		
PAD LIQUID PRESENT		
SUMP SOLIDS PRESENT		
SEDIMENT REMOVAL (YES / NO)		

CFS Continuous Monitoring		
Volatile Organic Compounds (HNU-PID)		
Particulates (PCD-1)		

NOTE: If the concentration of organic vapors exceeds 5 ppm or the concentration of particulates exceeds 150 ug/cu meter, the inspector will immediately upgrade to Level B protection to continue his inspection.

# T-AREA ROLLOFF STORAGE PAD WEEKLY INSPECTION REPORT

NOTE ANY DEFECTIVE CONDITIONS (ie: FULL OR FLOODED PAD, LEAKING ROLLOFFS) AND THE REQUIRED REMEDIAL ACTION TO CORRECT THE CONDITION.

	YES	NO	CORRECTIVE ACTION PLAN / COMMENTS
<b>1. ROLLOFF PLACEMENT</b>			
IMPROPER CONTAINERS PRESENT (NO DRUMS)			
NOT ON RAILS OR LOAD PADS			
aisle space insufficient			
ROLLOFFS STACKED OVER 1 HIGH			
ROLLOFFS NOT IN DESIGNATED AREAS			
<b>2. ROLLOFF CONDITION</b>			
DAMAGED			
RAINWATER PONDS ON COVERS			
COVER DETERIORATION			
COVER NOT SECURED			
LEAKING			
<b>3. AISLE SPACING</b>			
NOT CLEAR			
<b>4. RAMP CONDITION</b>			
UNEVEN SETTLEMENT			
CRACKED/DETERIORATION OF SURFACE			
SPILLED MATERIAL PRESENT			
<b>5. PAD &amp; DIKE WALL CONDITION</b>			
LIQUID PRESENT			
CRACKED/DETERIORATION OF SURFACE			
SPILLED MATERIAL PRESENT			
<b>6. SEDIMENT SUMP CONDITION</b>			
SOLIDS PRESENT			
CRACKED/DETERIORATION OF SURFACE			
<b>7. WARNING SIGN</b>			
NOT READABLE			
DAMAGED			

I CERTIFY THAT THIS REPORT IS CORRECT AT THE TIME OF THIS INSPECTION.

DATE: \_\_\_\_\_

INSPECTOR'S SIGNATURE: \_\_\_\_\_

# OCCIDENTAL CHEMICAL CORPORATION

## X-AREA

(FORMER RADIO TOWER PROPERTY)

### FENCING INSPECTION REPORT

The Fencing around the former Radio Tower Property must be inspected weekly for the following items per OCC's Part 373 Permit to Operate.

Any problems detected must be corrected within the next two weeks.

1. All man and vehicle gates are closed and locked.
2. The fencing itself is in good condition. (ie. No Holes, not falling over or heaved up.)
3. There are no large holes under the fence line.

DATE FENCE INSPECTED: \_\_\_\_\_

\_\_\_\_\_ NO PROBLEMS FOUND.

\_\_\_\_\_ THE FOLLOWING PROBLEMS AND THEIR LOCATIONS WERE FOUND:

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THE REMEDIAL ACTIONS PLANNED TO CORRECT THE PROBLEM(S) ARE:

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SIGNATURE OF INSPECTOR \_\_\_\_\_

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